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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,956	10/03/2003	Mikio Naruse	116-031937	7292
28289	7590	08/23/2005	EXAMINER	
THE WEBB LAW FIRM, P.C. 700 KOPPERS BUILDING 436 SEVENTH AVENUE PITTSBURGH, PA 15219			JOHNSTON, PHILLIP A	
			ART UNIT	PAPER NUMBER
			2881	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/678,956

Applicant(s)

NARUSE, MIKIO

Examiner

Phillip A. Johnston

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2-23-2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Detailed Action***

***Claims Rejection – 35 U.S.C. 103***

1 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

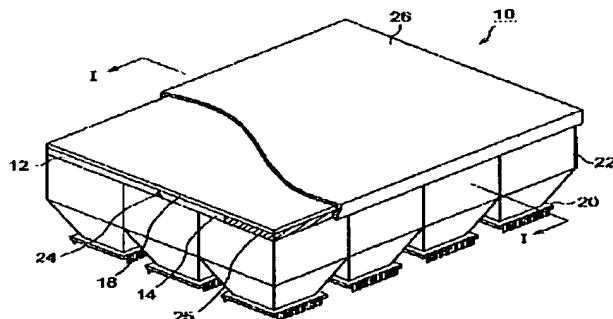
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Pub. No. 2001/0054694 to Kusuyama, in view of Mooney, U.S. Patent No. 5,635,720.

Kusuyama (694) discloses the following;

(a) Radiation image sensor 10 that includes a scintillator 18 deposited (grown) on the entrance end faces 12a, 14a of optical members 12, 14; a plurality of CCDs 20 (imaging devices) for capturing optical images outputted from exit end faces 12b, 14b of the optical members 12, 14; and a plurality of light-guiding optical components 22 for guiding to the CCDs 20 the optical images outputted from the exit end faces 12b, 14b of optical members 12, 14, as recited in claims 1,6, and 7. See paragraph [0025]; and Figure 1 below;

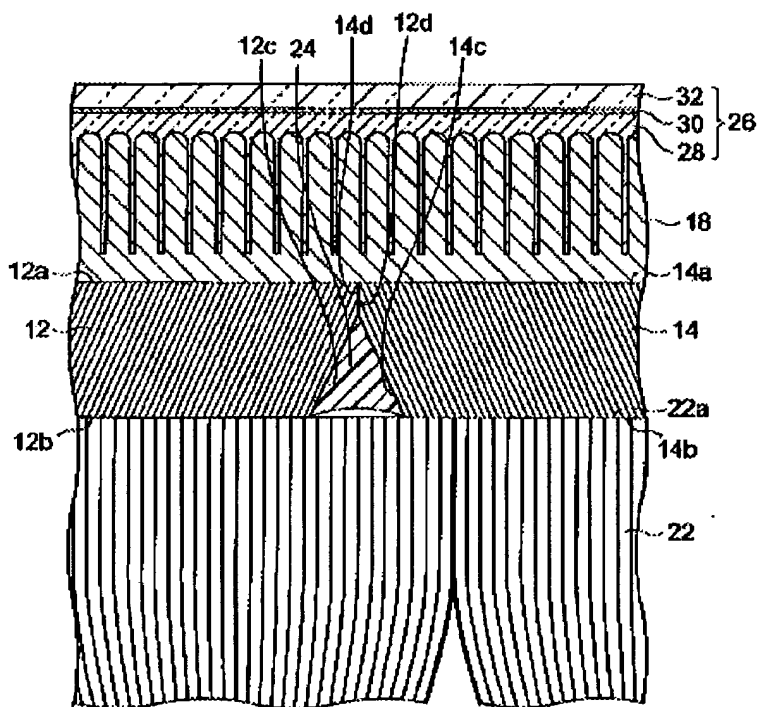
***Fig. 1***



(b) Dividing and rearranging the images through image processing, as recited in claims 6 and 7. See paragraph [0052];

(c) Fiber bundles 22 bent out and away from the optical axis, as recited in claim 4. See Figure 2 below.

**Fig.2**

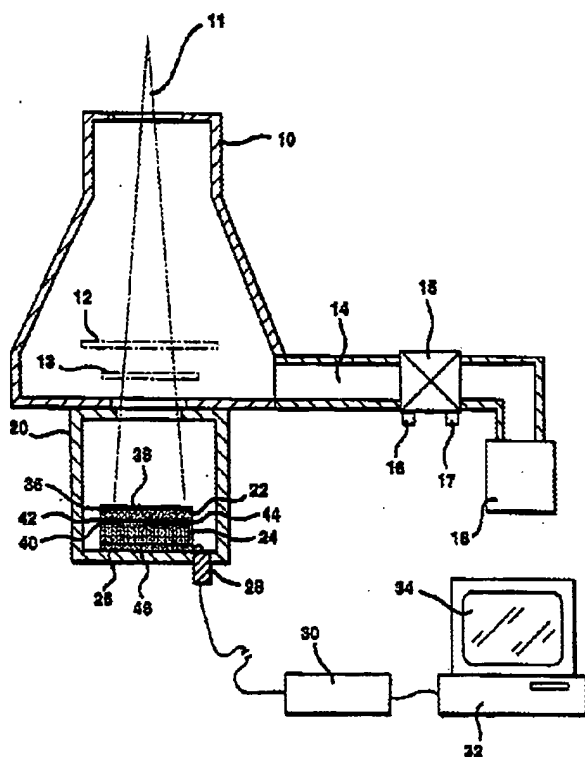


(d) Seamless end faces 14d and 14c ground and polished, as recited in claim 4. see paragraph [0053] and Figure 2 above;

(e) Optical members 12 and 14 are formed by arranging a plurality of optical fibers sliced obliquely with respect to the optical fiber axis. As a result, the obliquely cut optical fiber entrance faces 12a and 14a of members 12 and 14 are in contact with scintillator 18 and the exit faces are integrally molded to the fiber light guides 22, as recited in claims 2 and 3. See paragraph [0044]; and Figure 2 above.

Kusuyama (694) as applied above fails to teach the projection of a TEM (Transmission Electron Microscope) image onto the sensitive surfaces of a radiation imaging detector that utilizes plural CCD elements. However, Mooney (720) discloses an imaging apparatus utilizing CCD's that is mounted in the projection chamber of a transmission electron microscope, as recited in claims 1,6, and 7. See Column 3, line 9-33; and Figure 1 below.

FIG. 1



Therefore it would have been obvious to one of ordinary skill in the art that the radiation imaging detector and method of Kusuyama (694) can be modified for use in the Transmission Electron Microscope of Mooney (720), to provide a detector

designed to be positioned in the projection chamber of an electron microscope to detect electron images and/or diffraction patterns from a sample and convert those electron images into light images.


***Conclusion***

6. Any inquiry concerning this communication or earlier communications should be directed to Phillip Johnston whose telephone number is (571) 272-2475. The examiner can normally be reached on Monday-Friday from 6:30 am to 3:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor John Lee can be reached at (571) 272-2477. The fax phone number for the organization where the application or proceeding is assigned is 703 872 9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PJ

August 18, 2005

  
JOHN R. LEE  
SUPERVISORY PATENT EXAMINER  
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